

AMENDMENTS TO THE CLAIMS

We claim:

1-58 (Canceled)

1 59. (Original) A method of three dimensional printing an article, comprising dispensing
2 through a printhead a liquid composition comprising a halogenated hydrocarbon solvent, a co-
3 solvent that is miscible with the halogenated hydrocarbon solvent, and a conductivity enhancing
4 substance that is soluble in at least one of the halogenated hydrocarbon solvent and the co-
5 solvent.

60. (Original) The method of claim 59 wherein the printhead comprises means for
imparting electric charge to droplets of the liquid.

61. (Original) The method of claim 59 wherein the printhead is a continuous jet with
deflection printhead.

62. (Original) The method of claim 59 wherein the printhead produces droplets by means
other than a continuous jet.

63. (Original) The method of claim 59, further comprising, after the dispensing, heating
the article to a sufficient temperature for a sufficient time to promote evaporation of at least some
of the liquid composition.

64. (Original) The method of claim 63 wherein the evaporation includes evaporation of
the conductivity enhancing substance.

65. (Original) The method of claim 63 wherein the heating is performed after deposition
of the liquid composition on an individual powder layer.

66. (Original) The method of claim 63 wherein the heating is performed after completion
of three-dimensional printing.

67. (Original) The method of claim 59, further comprising, after the dispensing, heating
the article to a sufficient temperature for a sufficient time to cause decomposition of at least
some of the liquid composition.

68. (Original) The method of claim 67 wherein the decomposition includes
decomposition of the conductivity enhancing substance.

69. (Original) The method of claim 59, further comprising exposing the article to a sub-
ambient pressure for a time sufficient to promote evaporation of at least some of the liquid
composition.

70. (Original) The method of claim 69 wherein the evaporation includes evaporation of
the conductivity enhancing substance.

71. (Original) The method of claim 69, further comprising heating the article.

72. (Original) The method of claim 59, further comprising exposing the article to a flow of gas which is substantially free of the vapor of the liquid composition, for a time sufficient to promote evaporation of at least some of the liquid composition.

73. (Original) The method of claim 72 wherein the evaporation includes evaporation of the conductivity enhancing substance.

74. (Original) The method of claim 72, further comprising heating the article.

75. (Original) The method of claim 59, further comprising exposing the article to a supercritical fluid or a pressurized liquid of a substance that is gaseous at room temperature, under conditions suitable to remove at least one component of the liquid composition.

76. (Original) The method of claim 75 wherein the supercritical fluid or pressurized liquid is carbon dioxide.

77. (Original) The method of claim 75 wherein the supercritical fluid or pressurized liquid comprises carbon dioxide and an extraction co-solvent substance.

78. (Original) The method of claim 77 wherein the extraction co-solvent substance comprises methanol or acetone.

79. (Original) The method of claim 75 wherein the supercritical fluid or pressurized liquid comprises nitrous oxide or sulfur hexafluoride or a hydrocarbon or halogenated hydrocarbon having an atmospheric boiling point below room temperature.

80. (Original) The method of claim 59, further comprising exposing the article to water or an alcohol or another organic solvent.

81. (Original) An article manufactured by the method of claim 59.

82. (Original) The article of claim 81 wherein the article contains substantially no halogenated hydrocarbon solvent or co-solvent or conductivity enhancing substance.